## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Atty Dkt:** 4144-9

**Art Unit: 4173** 

1. (Currently Amended) An unlicensed-radio access network connected to a core network portion of a licensed mobile network, said unlicensed-radio access network comprising:

an access controller connected to said core network portion,

a fixed-broadband network connected to said access controller and having comprising a plurality of access points, each said access point defining a mini-cell coverage area and supporting an unlicensed-radio interface permitting communication between mobile stations located within a respective mini-cell and said access controller,

wherein said access controller is associated with one or more location areas in said licensed radio mobile network and comprises a database for storing the an identification of mobile stations in association with address information of said mobile station on said fixed broadband network, said access controller being adapted to delete said identification data when said mobile station ceases to operate in the coverage areas of said unlicensed radio access network.

2. (Previously Presented) An access network as claimed in claim 1, wherein said database is adapted to store the identification of mobile stations in association with at least one specific access point for the coverage area in which said mobile station is located.

- 3. (Currently Amended) An access network as claimed in claim 1, wherein said access point controller is adapted to receive from said core network portion a paging message containing the identification of a mobile station located in the associated location area, to identify the at least one access point associated with said identified mobile station, and to transmit said paging message to said identified at least one access point only.
- 4. (Currently Amended) An access network as claim 1, wherein said access network controller is adapted to receive from a mobile station a message registering identification data for said mobile station and to store said new identification data in said database in association with address information for said mobile station on said fixed-broadband network.
- 5. (Previously Presented) An access network as claimed in claim 1, wherein said mobile station identification data is the international mobile subscriber identity (IMSI).
- 6. (Currently Amended) An access network as claimed in claim 1, wherein said address information is comprises a network address of said access points on said fixed broadband network.

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7. (Currently Amended) An access network as claimed in claim 6, wherein said address information relates-identifies an access point communicating with said mobile station.

- 8. (Currently Amended) An access network as claimed in claim 1, wherein said access controller (303) is adapted to delete said identification data on receipt of a message from said access point that said mobile station is no longer communicating with said access point.
- 9. (Previously Presented) An access network as claimed in claim 1, wherein said access network controller is adapted to determine whether a connection with said mobile station is maintained and to delete said identification data on determining that said connection is no longer maintained.
- 10. (Previously Presented) An access network as claimed in claim 1, wherein said database is adapted to store the identification of mobile stations in association with a group of access point addresses, wherein said unlicensed access network comprises more than one group of access points.
  - 11. (Currently Amended) A method in an unlicensed-radio access network comprising a plurality of access points adapted to communicate with mobile stations over an unlicensed-radio interface and an access controller connected to said access points via a broadband network and to a core network portion of a licensed-radio cellular network, said method including the steps of comprising:

receiving identification information specific to a mobile station from said mobile station,

registering said mobile station identification information in association with information identifying at least one access point in said access point controller, and updating said registered information when communication between said mobile station and said unlicensed radio access network ceases.

12. (Previously Presented) A method as claimed in claim 11, further comprising:

receiving in said access controller a message from said core network portion paging a mobile station,

retrieving information identifying at least one access point for said paged mobile, and

forwarding said paging message only to the at least one access point identified in association with said registered mobile station identification information.

- 13. (Currently Amended) A method as claimed in claim 11, wherein said registering step includes registering said mobile station identification information in association with information identifying a group of access points in said access point controller.
- 14. (Currently Amended) A method in an unlicensed-radio access network comprising a fixed-broadband network with plurality of access points and an access controller connected to said fixed-broadband network and to a core network portion of a licensed-radio cellular network and adapted to communicate with mobile stations over an unlicensed-radio interface via said access points, said method comprising:

said access controller establishing communication with a mobile station using a network address on said fixed broadband network for said mobile station,

receiving identification information specific to a mobile station from said mobile station,

registering said mobile station identification information in association with said mobile station network address on said fixed-broadband network,

determining when a connection established with said mobile station is no longer maintained and deleting said mobile station identification information when it is determined that a connection is no longer maintained.

15. (Previously Presented) A method as claimed in claim 14, further comprising:

receiving in said access controller a message from said core network portion paging a mobile station,

retrieving mobile station identification information registered for said paged mobile, and

forwarding said paging message only to the network address identified in association with said registered mobile station identification information.

- 16. (New) An access network as claimed in claim 1, wherein the broadband network is a fixed broadband network.
- 17. (New) A method as claimed in claim 14, wherein the broadband network is a fixed broadband network